60130-1978
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REMARKS

Claims 1-20 remain pending in the application. New claims 21-23 have been added. Claim 20 has been amended to overcome the 35 U.S.C. 112, second paragraph, rejection. Claims 7, 11, 12, and 14 are indicated as allowable. Further, as claim 20 has been amended to overcome the 35 U.S.C. 112 rejections, claim 20 should also be allowable.

Claims 1, 4, and 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (US6260353). Claim 1 is directed to an exhaust system for a diesel propulsion engine having a discontinuously regenerating exhaust gas purification system. Takahashi does not disclose such a system.

The examiner argues that the recited catalytic converter unit that burns diesel fuel catalytically has been denied the effect of a limitation due to being set forth in the preamble. Applicant asserts that the recitation is proper as subsequent claim elements repeatedly refer back to the catalytic converter unit. However, in order to address the examiner's concerns, applicant has amended claim 1 to positively recite the discontinuously regenerating exhaust gas purification system and the catalytic converter unit that burns diesel fuel catalytically. Takahashi clearly does not disclose such a system.

Further, claim 1 recites a fuel evaporator unit. The fuel evaporator changes fuel from a liquid state to a vapor state. Applicant's system does not chemically change the diesel fuel. Takahashi does not disclose such a fuel evaporator unit. Instead, Takahashi discloses the use of an air supply passage 32 connected to a pressurized air tank 36. The air supply passage 32 is surrounding by a heating device 44. A fuel injection valve 40 is positioned upstream of the heating device 44.

> A certain amount of diesel fuel or light oil, which is determined depending upon the flow rate of the air, is injected from the fuel injection valve 40 into the air supply passage 32 on the downstream side of the flow rate control valve 34, while diesel fuel reserved in the fuel tank 18 is supplied to the fuel injection valve 40 through the fuel supply branch pipe 42. The mixture of the air and diesel fuel in the form of mist is heated by the heating device 44 up to about 350 DEG C. to 400 DEG C., so that the diesel fuel in the supplied air containing a large amount of oxygen is partially oxidized to provide cracked gas containing a large amount of aldehydes such as acetaldehyde or formaldehyde, propylene, ethylene, or the like, which has a high NOx reducing capability. Column 5, lines 49-62.

Thus, heating device 44 in Takahashi is used to heat a mixture of air and diesel fuel so that the mixture is partially oxidized to provide a cracked gas having a particular chemical composition. This structure cannot be considered as corresponding to applicant's claimed fuel evaporator unit.

While it is well settled that the terms in a claim are to be given their broadest reasonable interpretation, this interpretation must be consistent with the specification, with claim language being read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Bond, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990). Here, the meaning of "fuel evaporator unit" has clearly been improperly expanded. As set forth at paragraph [11] of the subject application: "The physical process occurs in the fuel evaporator unit alone where the state of matter of the diesel fuel changes from the liquid to the vapor state; there is no chemical change of the diesel fuel occurring, such as reformation or the like." One of ordinary skill in the art simply would not consider the apparatus in Takahashi that provides a chemical transformation of diesel fuel into a cracked gas as corresponding to applicant's claimed fuel evaporator unit. Thus, for the many reasons set forth above, Takahashi does not anticipate claim 1.

Claims 2, 3, and 16-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Kupe (US 6832473). For the reasons set forth above, Takahashi does not disclose, suggest, or teach the claimed invention. Kupe does not make up for the deficiencies of Takahashi.

Claims 5 and 8-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Nieuwstadt (US 6834498). For the reasons set forth above, Takahashi does not disclose, suggest, or teach the claimed invention. Nieuwstadt does not make up for the deficiencies of Takahashi.

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Nieuwstadt (US 6834498), and further in view of legal precedent. Claim 15 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of legal precedent. For the reasons set forth above, Takahashi does not disclose, suggest, or teach the claimed invention. Nieuwstadt does not make up for the deficiencies of Takahashi.

Further, applicant traverses the examiner's application of legal precedent, which cites In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). If applicant has demonstrated the

importance of a certain limitation, it is not appropriate for the examiner to rely solely on case law as the rationale for supporting an obviousness rejection. See MPEP 2144. As set forth in paragraph [15] of the subject application, applicant has explained the importance of providing an annular gap as claimed.

Also, the case law cited by the examiner does not include facts that are sufficiently similar to those of the present application. See MPEP 2144. The invention set forth in the case of In re Boesch concerns the formation of an alloy. Decisions in such chemical composition cases have no bearing on applicant's invention.

Applicant asserts that claims 1-23 are in condition for allowance and respectfully requests and indication of such. A check is enclosed to cover the cost of 3 additional claims. Applicant believes that no additional fees are due, however, if any additional fees are due, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment.

Respectfully Submitted,

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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, (703) 872-9306 on May 10, 2005.

Laura Combs